

Module designation	Soil Biology
Semester(s) in which the module is taught	Odd/5 th
Person responsible for the module	Prof. Tien Aminatun, M.Si., Dr. Ir, Suhartini, MS.
Language	Bahasa Indonesia
Relation to curriculum	Compulsory
Teaching methods	Lecture, project, seminar, exam
Workload (incl. contact hours, self-study hours)	Total workload is 91 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks.
Credit points	2 SKS (3.2 ECTS)
Required and recommended prerequisites for joining the module	Microbiology Ecology
Module objectives/intended learning outcomes	PLO-2 PLO- 4 PLO-5 PLO-6 PLO-8 PLO-9
Content	This course discusses soil as a living ecosystem including its composition, organic substances, fertility, nutrients, as well as the interaction and organisms under the soil as an attempt to manage and preserve soil and water.
Examination forms	Presence, task, mid-semester exam, final semester exam, case study, team based project.

Study and examination requirements	<p>The final mark will be weight as follow:</p> <table><tr><th>NO</th><th>Assessment Techniques</th><th>Percentage Weight Assessment (%)</th><th>Information</th></tr><tr><td>1</td><td>Cognitive</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr><tr><td rowspan="4"></td><td>Presence</td><td>5</td><td></td></tr><tr><td>Task</td><td>10</td><td></td></tr><tr><td>Mid-semester exams</td><td>15</td><td></td></tr><tr><td>Final Semester Exam</td><td>20</td><td></td></tr><tr><td>2</td><td>Participatory</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr><tr><td rowspan="3"></td><td>Case study</td><td>25</td><td></td></tr><tr><td>Team Based Project</td><td>25</td><td></td></tr><tr><td>Total</td><td>100</td><td></td></tr></table>	NO	Assessment Techniques	Percentage Weight Assessment (%)	Information	1	Cognitive	50	Maximum assessment weight accumulation 50%		Presence	5		Task	10		Mid-semester exams	15		Final Semester Exam	20		2	Participatory	50	Maximum assessment weight accumulation 50%		Case study	25		Team Based Project	25		Total	100	
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Reading list	<p>A. Wilson, C.R. dan J.R. Feucht , 2010. Composting YardWaste. Colorado State University Extension. Leaves andLeaf Anatomy. Retrieved from http://www.enchantedlearning.com/subjects/plants/leaf/</p> <p>B. Brata, K.R. dan Nelistya, A., 2008. Lubang Biopori, Penebar Swadaya, Jakarta.</p> <p>C. Yulipriyanto, H., 2009. Ilmu Pengomposan. Yogyakarta : Biologi F MIPA Universitas Negeri Yogyakarta.</p> <p>D. Yulipriyanto, H., 2010. Biologi Tanah dan Strategi Pengelolaannya, Graha Ilmu, Yogyakarta.</p> <p>E. Zambonelli and G.M. Bonito. 2012 (eds.), EdibleEctomycorrhizal Mushrooms, Soil Biology 34, DOI10.1007/978-3-642-33823-6_8, # Springer-Verlag Berlin Heidelberg.</p> <p>F. Moreira, Fatima M. S., Huising, E. Jeroen. 2008. A Handbook of Tropical Soil Biology: Sampling and Characterization of Below-ground Biodiversity. Taylor and Francis.</p>																																			